

Determination of Public Land (Rangeland) Health for 62016 ELMER NORTHCUTT

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within Elmer Northcutt allotment #62016, meets the (1) Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ Eddie Bateson
Field Manager

9/12/2006
Date

Standards of Public Land Health

Evaluation of 62016 ELMER NORTHCUTT Allotment

[05/09/2006]

The Roswell Field Office conducted a Rangeland Health Assessment at one (1) study site within Elmer Northcutt allotment #62016. This assessment evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of this study site. Existing monitoring data was incorporated into and in support of this field assessment. A summary of this assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
62016-IDSU-A024	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Elmer Northcutt, allotment #62016. Ten of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected on one location were utilized to assess rangeland health of public land within this allotment. This allotment is a "C" (custodial) category due to small amounts of public land present.

Upland and Biotic standards were evaluated for this High Plains-2 Loamy ecological site on 120 acres/48.5 hectares. Location is on a plateau of the Caprock. No livestock were observed although use was evident on both sides of the fence. Soil is La Lande-Chispa series classified as fine-loamy mixed, superactive thermic Ustic Haplocambids that are very deep formed in loamy alluvial materials. These materials derived mainly from the Ogallala Formation found on edges of plains in eastern Guadalupe county. Elevation is between 4,200 ft/1,272 m and 5,300 ft/1,606 m. Slopes vary from 0 to 5 to 15 percent. Raptor red-tailed hawk (*Buteo jamaicensis*), upland game bird quail (*Callipepla* spp.), ungulates pronghorn (*Antilocapra americana*) and mule deer (*Odocoileus hemionus*) were observed.

Majority of indicators assessed matched what is expected for the Caprock. Vegetation, mainly grasses were matted with very limited interspace. Gullies were only observed on west facing slopes of this Caprock area, but not as apparent south of the fenceline. Any erosion has been reduced by vegetation although blue grama (*Bouteloua gracilis*) appears deteriorated. Cholla (*Opuntia imbricata*) and juniper (*Juniperus* spp.) both are encroaching and Moderately scattered. Beargrass (*Nolina microcarpa*) was also observed. This is P/J country however and all attributes indicate normal range of variability from established parameters. Departure from ecological reference areas is minimal.

Wildlife - Evaluation of the integrity of biotic community considered several indicators as attribute indices for the area of interest. Biotic indicators are interrelated with several other indicators, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address vegetative aspects of the ecological site description, such as functional/structural groups and plant mortality & decadence. This habitat looks productive at present. As per conversation with the adjacent landowner, pronghorn and quail populations have dramatically increased from 2005 and have no doubt followed suit on this allotment as well, since only a fence separates the two. Obviously wildlife have utilized this area for food and cover while having been allowed open range for dispersal and maintaining healthy viable populations. No Special Status Species Habitat or Populations concerns occur on this allotment.

It is the professional opinion of the Assessment Team, public land within allotment #62016 Elmer Northcutt meets Upland and Biotic Standards. There are no Riparian issues present therefore this standard was not addressed. See site notes, comments and recommendations for further information regarding this assessment.

Recommendations: Livestock stocking rates are ample here taking into account terrain and climate. Cow-calf or yearlings best utilize this site especially during winter months due to large percentages of grass in this vegetative community. Forbs are somewhat declining but should rebound along with grass species with onset of wetter conditions. At present, deferred grazing varying seasons of rest and use during successive years is necessary to maintain a healthy vegetative community. Growing season deferment should be employed for warm C4 vegetation to establish and dormant season conservative grazing for those cool C3 varieties. In addition spring rest should allow those cool season grasses like western wheatgrass (*Agropyron smithii*) and bottlebrush squirreltail (*Sitanion hystrix*) to proliferate and reproduce. Emphasis should be put on conservative use by livestock to curtail any increase of cholla.

Brush control by mechanical means to thin out stands of juniper and cholla is recommended if these species begin to inhibit forage production. Interseeding may also be employed for those ranges that exhibit sparse vegetation. No immediate threat exists but potential for further tree/shrub encroachment may warrant closer monitoring on more regular intervals. Opening up canopy and ground cover would only serve to increase forage production creating greater water infiltration, holding capacity and less runoff. Allowing grass components to proliferate while developing reproductive mechanisms and vegetative tillers should also reduce erosion potential.

These isolated/scattered public land parcels of 120 acre/48.5 hectares should be earmarked for disposal either by land exchange or sale if not already identified. Administratively and logistically, this would help to concentrate efforts from private and Federal sectors to manage their respective parcels more effectively. Just taking into account these land-locked tracts with no legal access, except by landowner permission should serve as strong criteria for disposal.

RFOs Upland and Biotic Standard Assessment Summary Worksheet

SITE 62016-IDSU-A024

Legal Land Desc	NWNE 11 0070N 0260E Meridian 23	Acreage	120
Ecosite	077BY026NM LOAMY HP-2	Photo Taken	Y
Watershed	13060001230 ALAMOGORDO		
Observers	ARTHUN/MCFERRAZ	Observation Date	05/23/2006
County Soil Survey	NM019 GUADALUPE	Soil Var/Taxad	
Soil Map Unit	030	Soil Taxon Name	LA LANDE
Texture Class	NM019 L	Soil Phase	LA LANDE- CHISPA
Texture Modifier	NM019 LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	12.31	NOAA Growing Season Precipitation	9.22
NOAA Avg Annual Precipitation	10.69	NOAA Avg Growing Season Precipitation	8.85
Disturbances and Animal Use:	No livestock present.		

Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X
Comments:	Less than 20% is the current estimate.					
S H	Gullies					X

Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	20% or less is the current estimate.					
B	Annual Production					X
Comments:	80% of potential at present; at 400-450 lbs/ac or kg/ha not accounting for juniper or cholla					
B	Invasive Plants			X		
Comments:	increase in juniper and cholla					
B	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:						
B	Wildlife Habitat				X	
Comments:						
B	Wildlife Populations				X	

Comments:						
B	Special Status Species Habitat					X
Comments:	No special status species habitat concerns occur.					
B	Special Status Species Populations					X
Comments:	No special status species populations concerns occur.					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	2	8
H	Hydrologic	0	0	0	2	9
B	Biotic	0	0	1	4	8

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	0	10
Hydrologic		0	0	11
Biotic		0	1	12

Site Notes: Site gps'd with trend plot set and double-sampling and step-point transects run. Off the Caprock-bear grass- juniper is up/pinon; Production w/o P/J is 400-450 lbs/ac or kg/ha.

